













ER	Complex carbohydrate formation
Step 1 D5	 S
Step 2 D5	 3) - $\beta$ GalpNac-S
Step 3 H1	 3)- $\beta$ -D Galp-(1 $\rightarrow$ 3)- $\beta$ GalpNac-S
Step 4 D7	 4) - $\beta$ GlcpNac-(1 $\rightarrow$ 3)- $\beta$ -D Galp-(1 $\rightarrow$ 3) - $\beta$ GalpNac-S
Step 5 H3	 4)- $\beta$ -D Galp-(1 $\rightarrow$ 4) - $\beta$ D GlcpNac-(1 $\rightarrow$ 3)- $\beta$ -D Galp-(1 $\rightarrow$ 3) - $\beta$ GalpNac-S
Step 6 D7	 4) - $\beta$ -D -D -Glc pNac -(1 $\rightarrow$ 3) - $\beta$ -D Galp-(1 $\rightarrow$ 4) - $\beta$ D GlcpNac-(1 $\rightarrow$ 3)- $\beta$ -D Galp-(1 $\rightarrow$ 3) - $\beta$ GalpNac-S)
Step 7 D3	 3)- $\beta$ -D Galp -(1 $\rightarrow$ 4) - $\beta$ -D -D -Glc pNac -(1 $\rightarrow$ 3) - $\beta$ -D Galp-(1 $\rightarrow$ 4) - $\beta$ D GlcpNac-(1 $\rightarrow$ 3)- $\beta$ -D Galp-(1 $\rightarrow$ 3) - $\beta$ GalpNac-S)
Step 8 H14	 6) - $\beta$ -D Galp-(1 $\rightarrow$ 4) - $\beta$ D GlcpNac-(1 $\rightarrow$ 3)- $\beta$ -D Galp-(1 $\rightarrow$ 3) - $\beta$ GalpNac-S) $\beta$ -D Galp -(1 $\rightarrow$ 3)- $\beta$ -D Galp -(1 $\rightarrow$ 4)- $\beta$ -D -D -Glc pNac -(1 $\rightarrow$ 3)
Step 9 B2	- $\beta$ -D-Glc pNac-(1 $\rightarrow$ 6) - $\beta$ -D-Galp-(1 $\rightarrow$ 4)- $\beta$ -D-Galp-(1 $\rightarrow$ 4) - $\beta$ -D Galp-(1 $\rightarrow$ 4) - $\beta$ -D-Glc pNac-(1 $\rightarrow$ 3) - $\beta$ -D GlcpNac-(1 $\rightarrow$ 3)- $\beta$ -D Galp-(1 $\rightarrow$ 3) - $\beta$ GalpNac-S)  3)
Step 10 D7	 4) - $\beta$ -D-Glc pNac-(1 $\rightarrow$ 6) - $\beta$ -D-Galp-(1 $\rightarrow$ 4)- $\beta$ -D-Galp-(1 $\rightarrow$ 4) - $\beta$ -D Galp-(1 $\rightarrow$ 4) - $\beta$ -D-Glc pNac-(1 $\rightarrow$ 3) - $\beta$ -D GlcpNac-(1 $\rightarrow$ 3)- $\beta$ -D Galp-(1 $\rightarrow$ 3) - $\beta$ GalpNac-S) - $\alpha$ -L Fucp-(1 $\rightarrow$ 3) - $\alpha$ -L Fucp-(1 $\rightarrow$ 3)

**Fig. 4**

Figure 5a

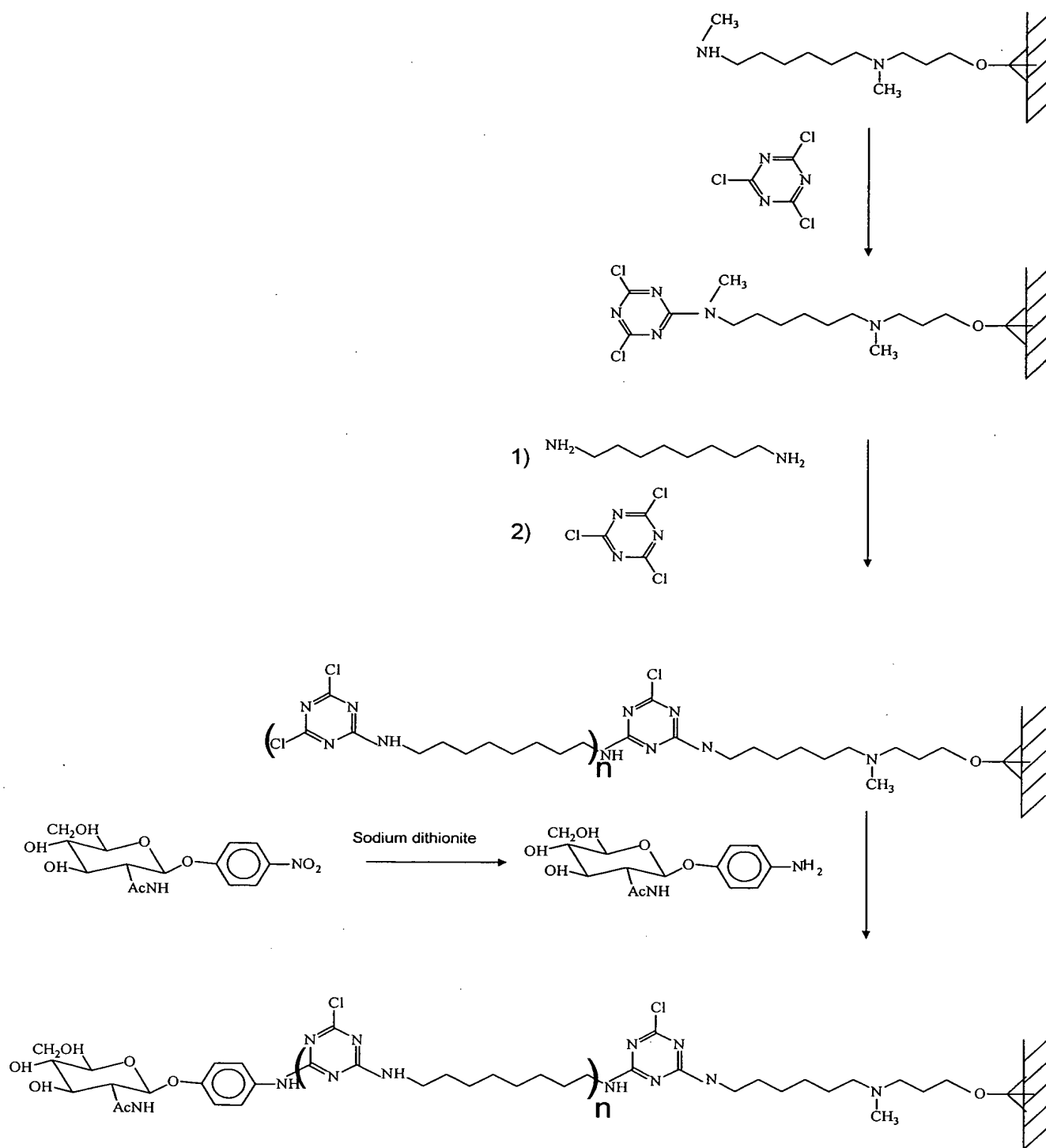
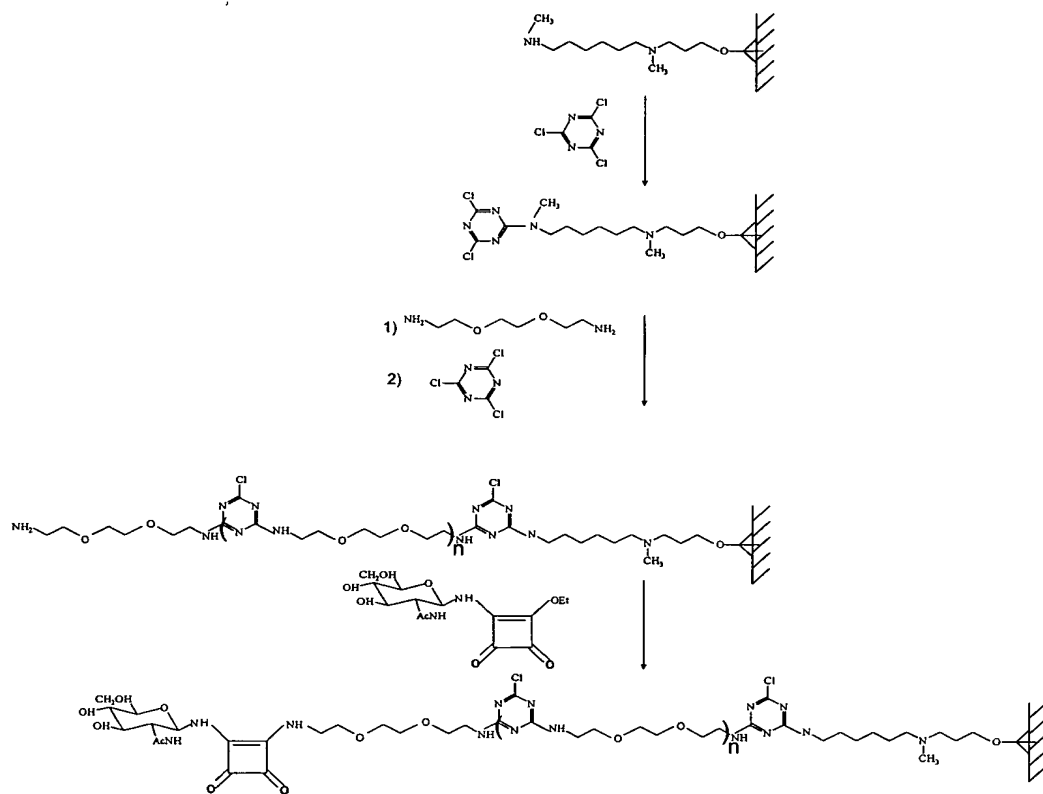


Figure 5b



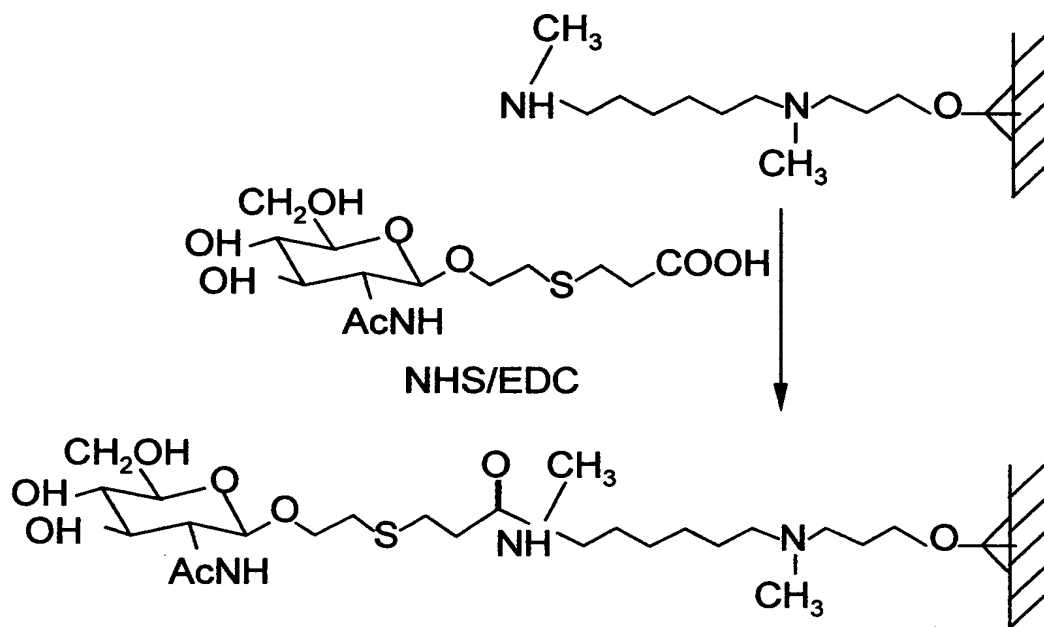


Fig. 6

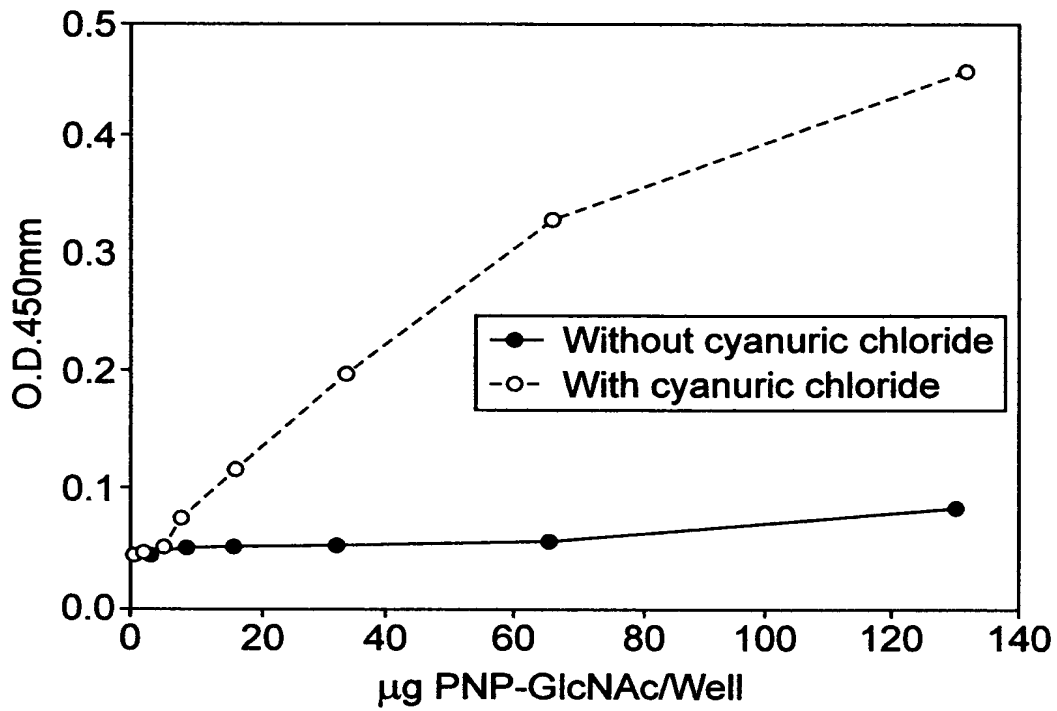


Fig. 7a

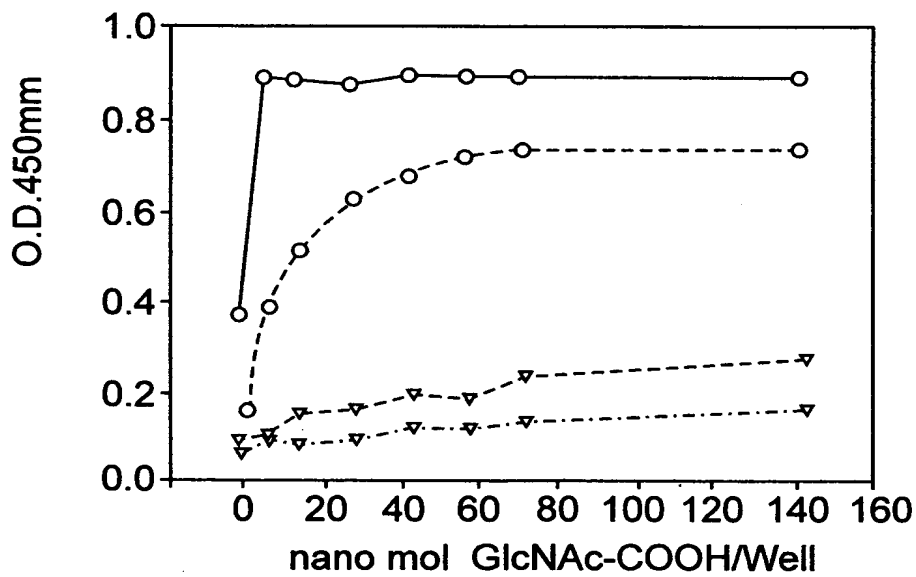


Fig. 7b

- No blocking
- BSA blocking
- ▽- Acetic Anhydride blocking
- ▽- Acetic Anhydride blocking + BSA blocking

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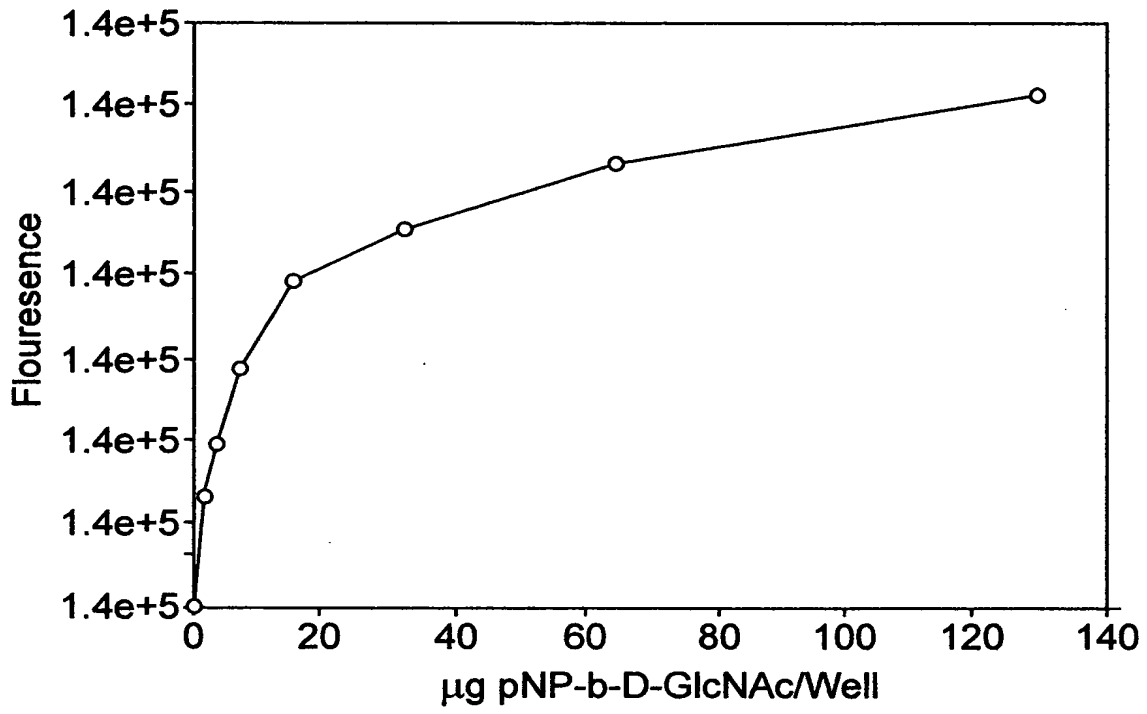


Fig. 7c

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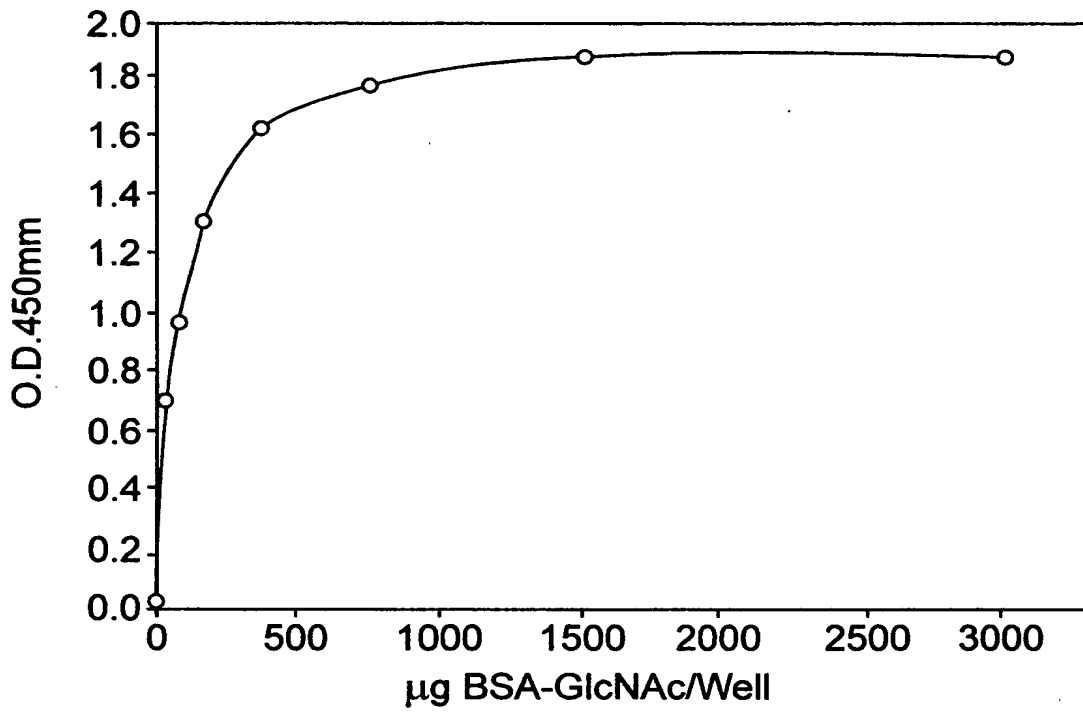


Fig. 8a

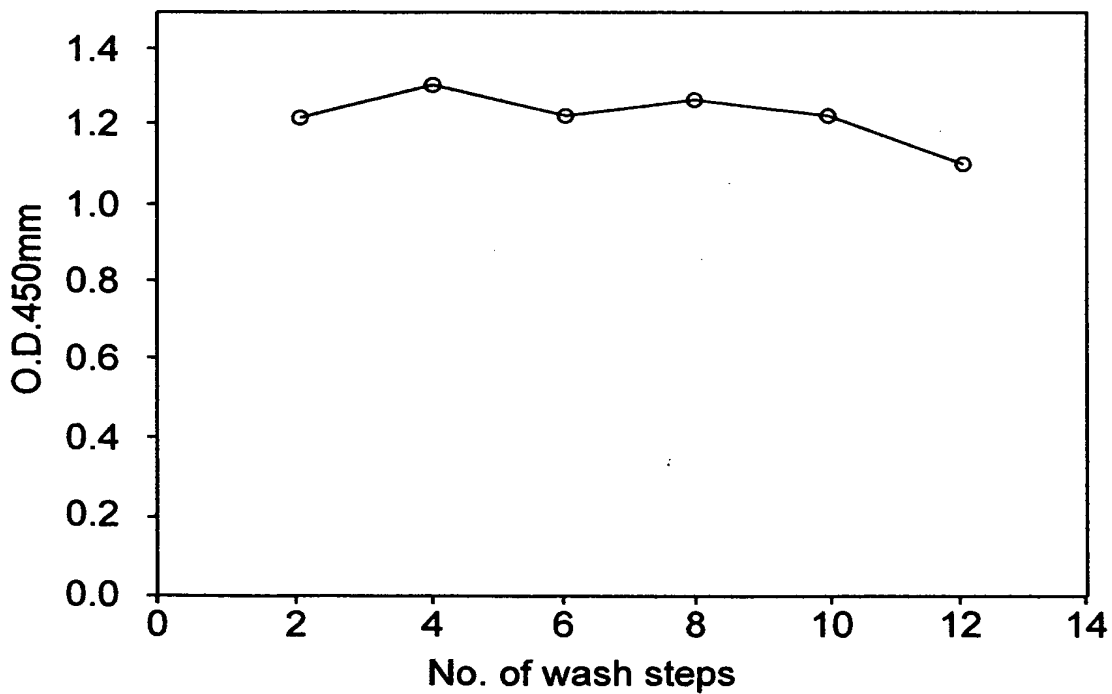


Fig. 8b



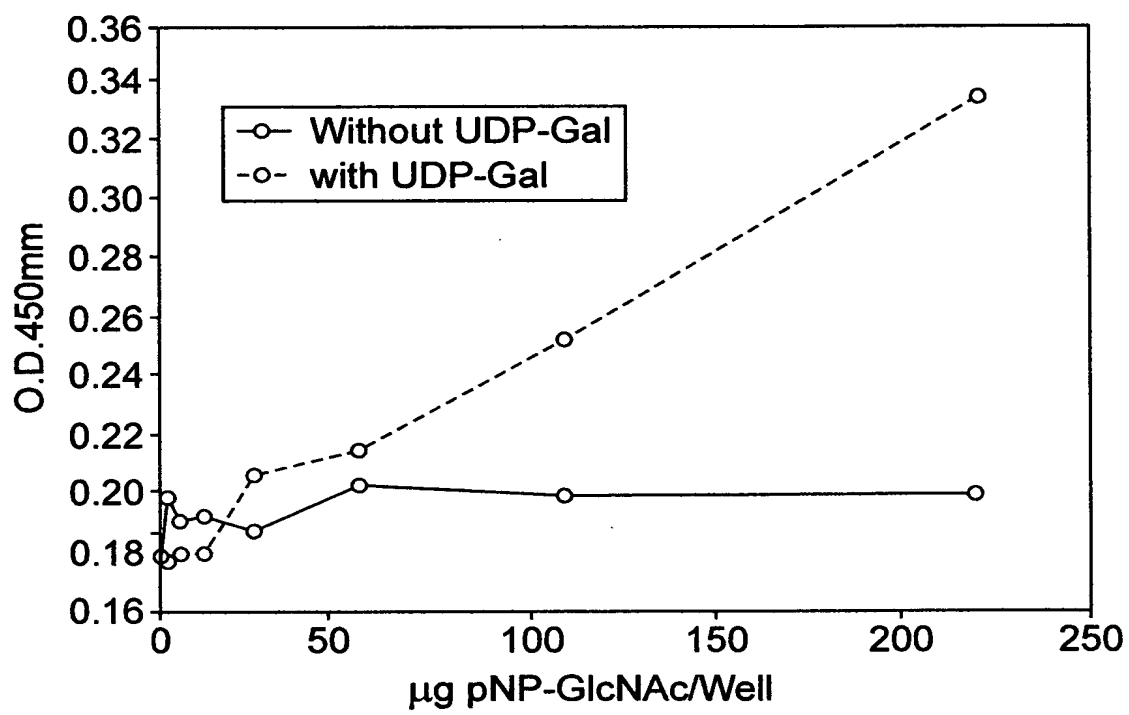
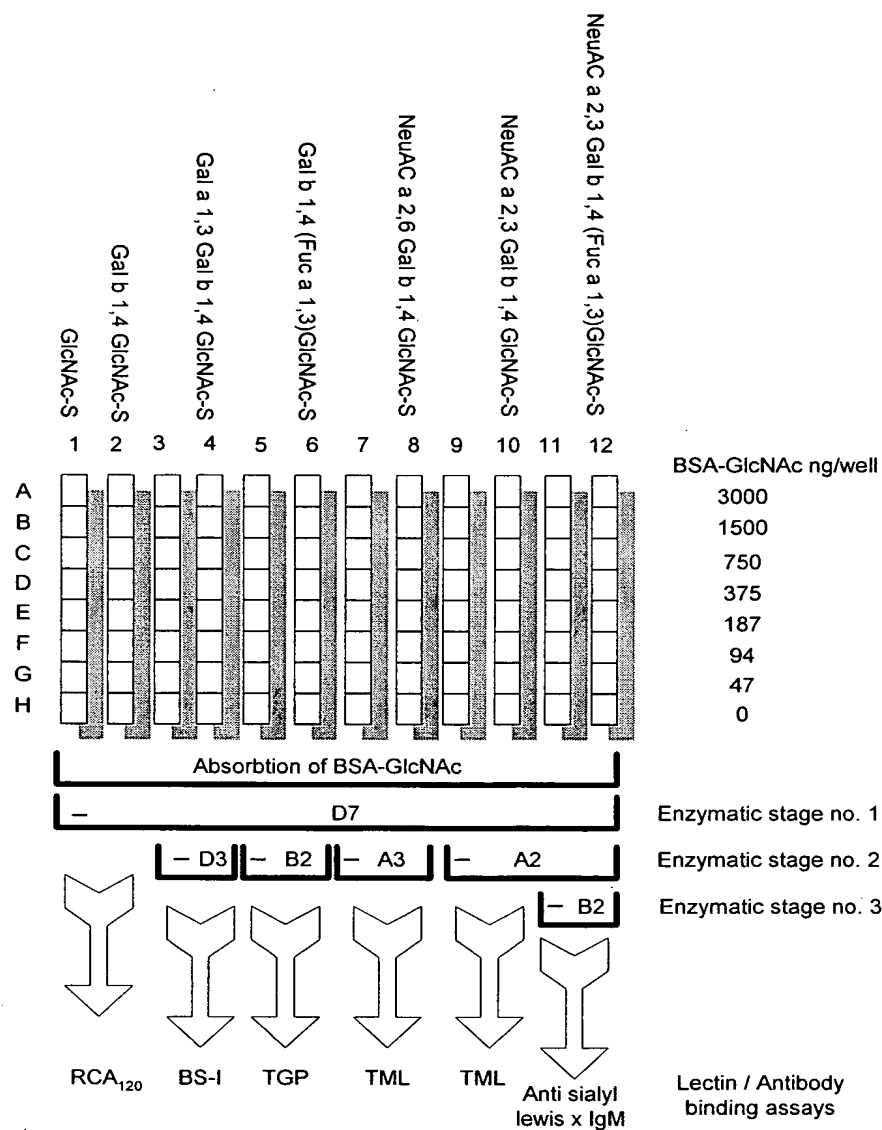


Fig. 8c

Figure 9



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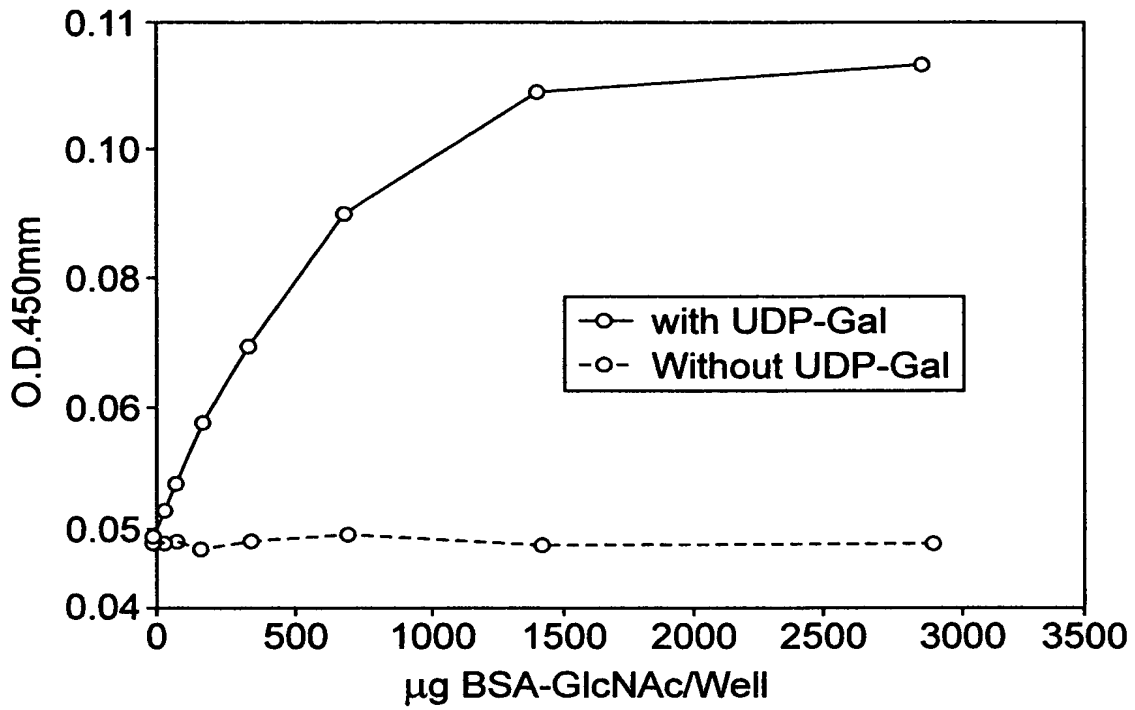


Fig. 10a

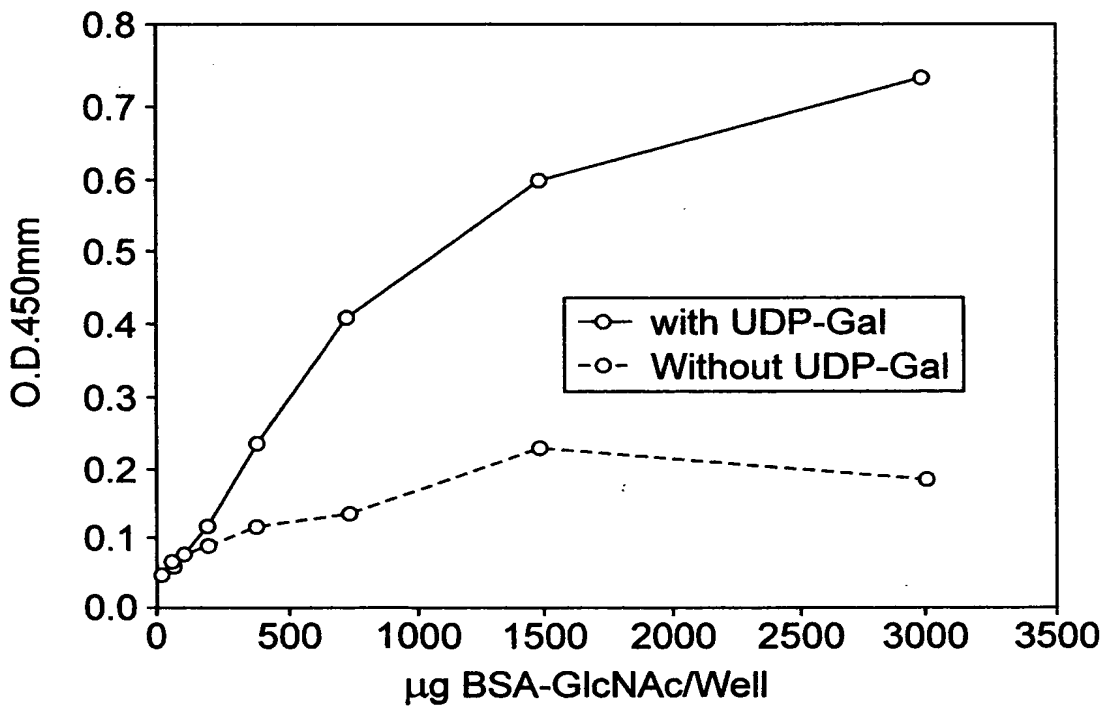


Fig. 10b

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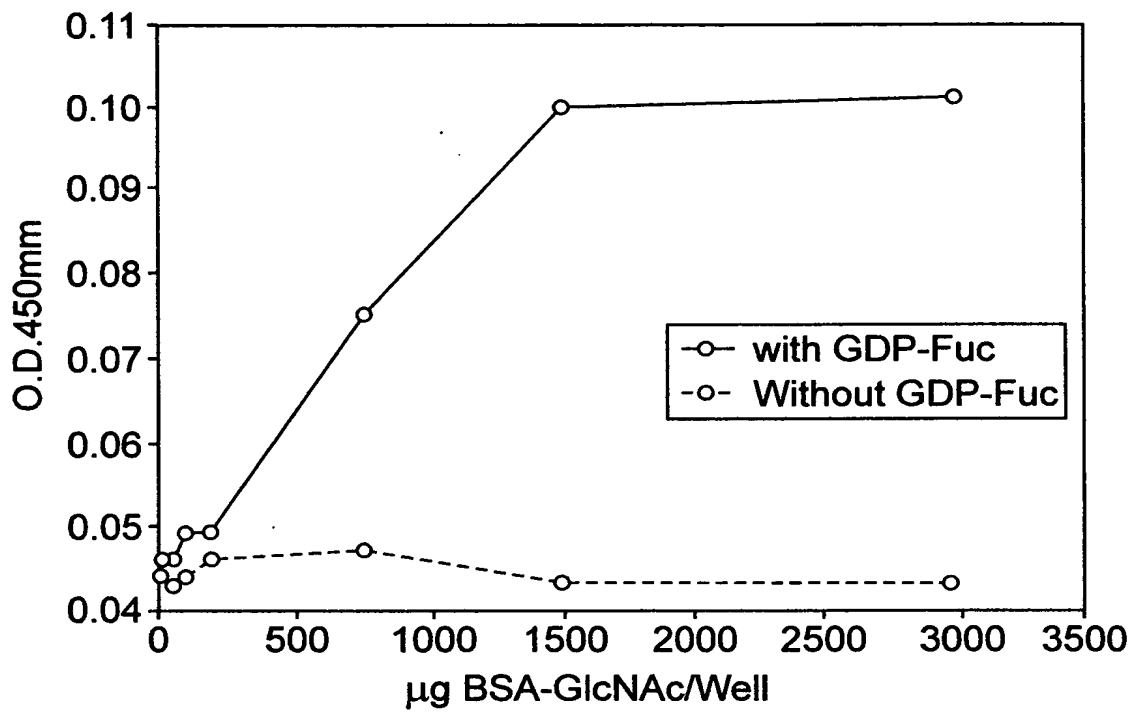


Fig. 10c

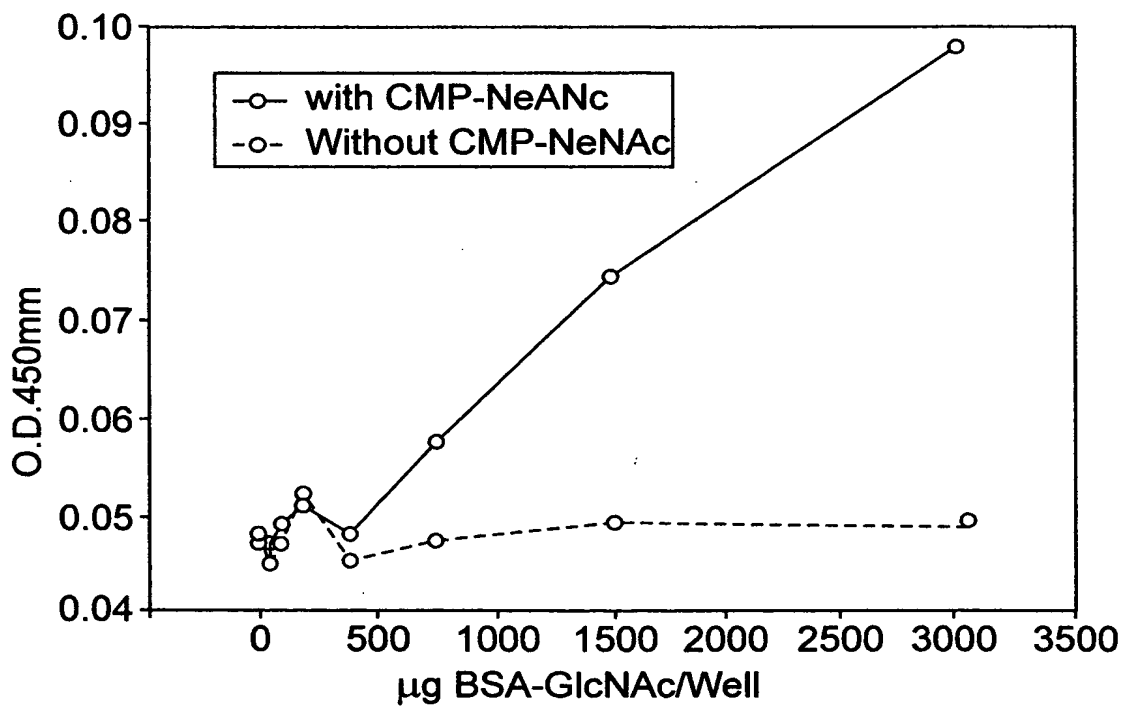


Fig. 10d

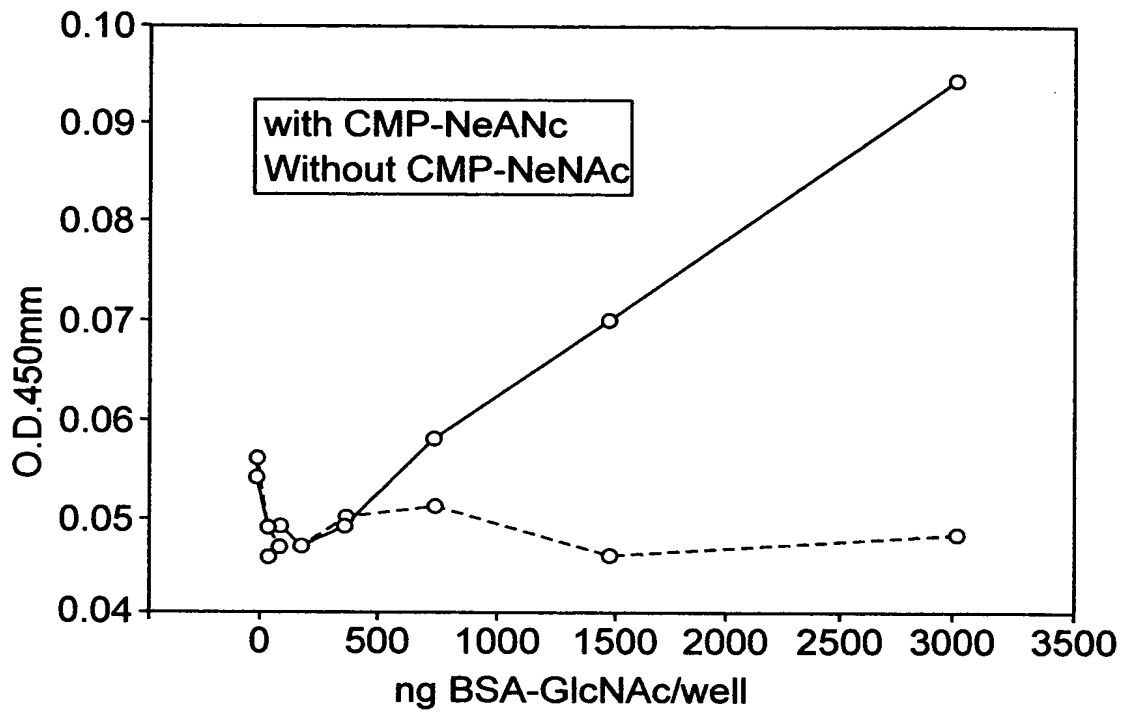


Fig. 10e

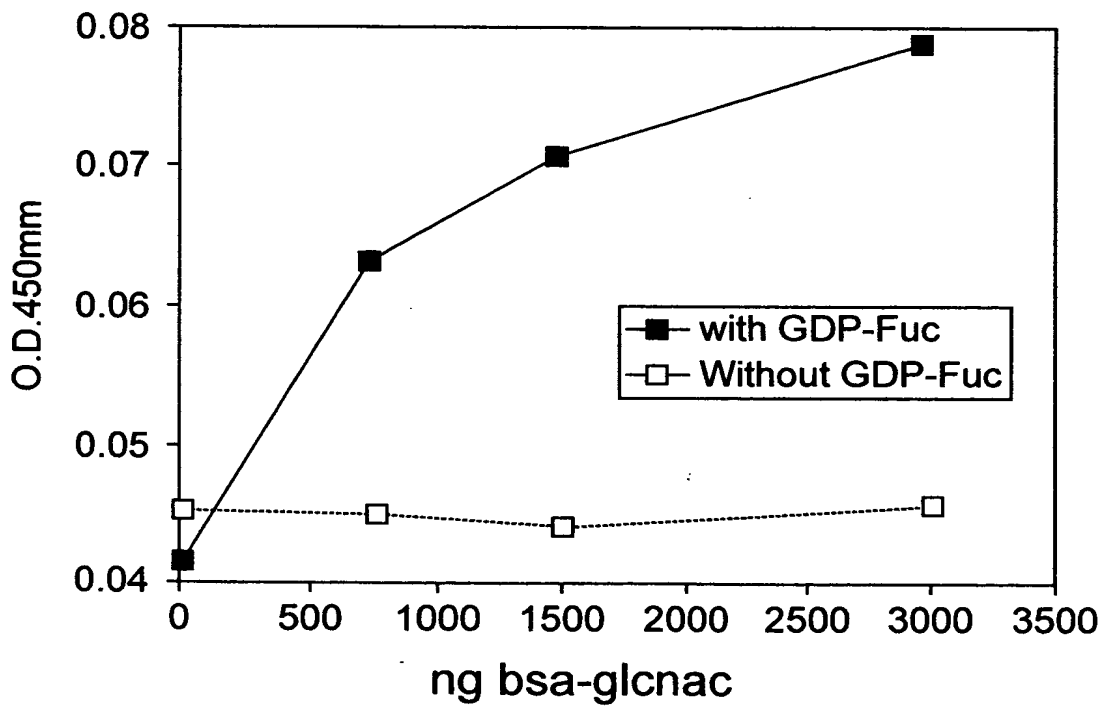


Fig. 10f

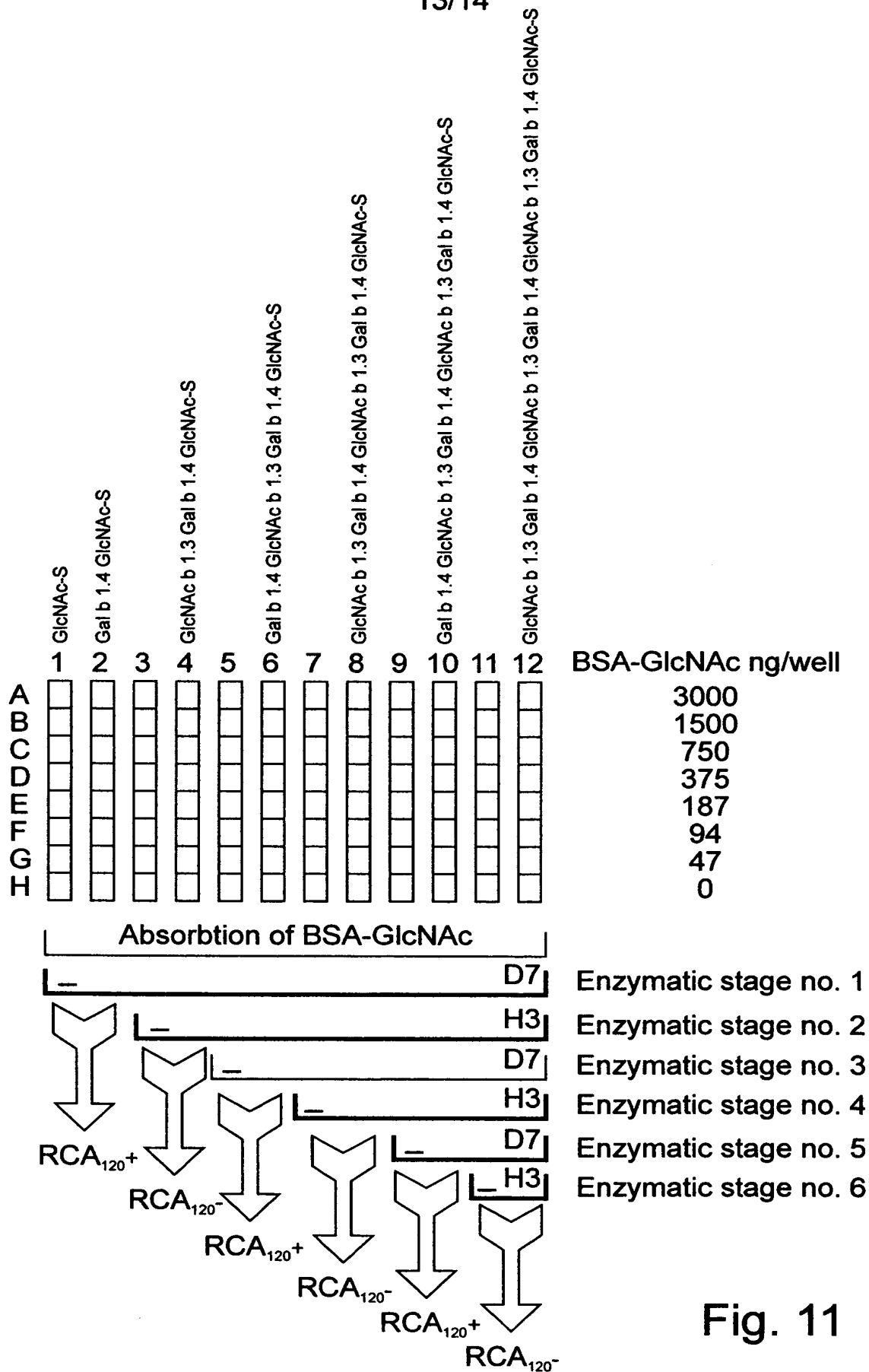


Fig. 11

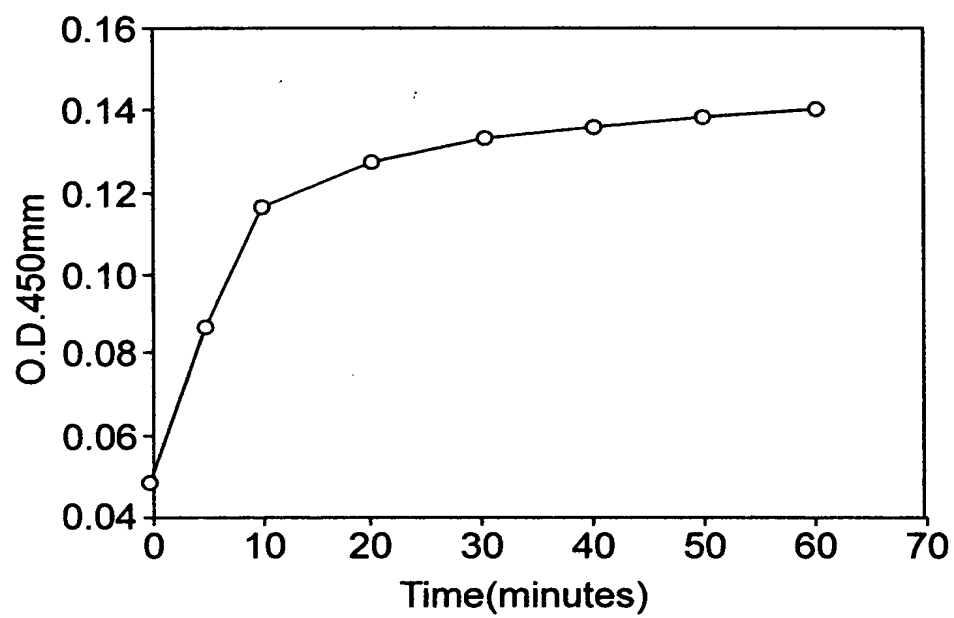


Fig. 12

Time (minutes)	O.D. 450nm
0	0.08
5	0.75
10	0.78
15	0.95
20	0.98
25	0.92
30	0.98
40	0.97
50	0.93
60	0.96
120	0.98
180	0.97
240	0.92

Fig. 13